

Attorney Docket No.: 045636-5054  
Application No.: Unassigned

### REMARKS

Applicants respectfully submit that no prohibited new matter has been introduced by this Preliminary Amendment and that amended claims 12-20 are drawn to the same invention as claims 1-11 of International Application PCT/FR00/00217. The changes to the claims represent changes in formalities so as to bring the claims into compliance with the rules of practice in the United States, by avoiding improper multiple dependencies and eliminating multiple dependencies to reduce costs; and to eliminate improper "use" claims.

Respectfully Submitted,

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**MARKED UP VERSION SHOWING CHANGES**

As to the paragraph bridging pages 1 and 2, note change in residue positions referred to:

Alzheimer's disease is a neurodegenerative disorder which affects from 1 to 6% of the population over the age of 65. One of its characteristics is the presence of senile plaques which contain  $\beta$ -amyloid ( $\beta$ A4 or BAP), which is a toxic product derived from APP and consisting of peptides of 39 to 42 amino acids, which are engendered by cleavage of APP by two proteases,  $\beta$ - and  $\gamma$ -secretase. Moreover, a third enzyme, named  $\alpha$ -secretase, cleaves APP between the  $\beta$ - and  $\gamma$ -sites, therefore making it impossible to form the supposedly pathogenic  $\beta$ A4. None of these secretases has, to date, been identified, even though there are legitimate suspicions regarding the PS1 protein (product of the Presenilin-1 gene, mutated in familial forms of Alzheimer's disease). In fact, PS1 may be either  $\gamma$ -secretase or one of its cofactors. Finally, other cleavage sites exist in the C-terminal domain, including the site for caspases (N. Barnes et al., J. Neuroscience, 1998, 18, 15, 5869-5880), between the aspartate and alanine residues of SEQ ID NO: 1 (positions [15] 16 and [16] 17). It remains that the mechanisms responsible for the toxicity of  $\beta$ A4 are unknown and that the relationship between the presence of  $\beta$ A4 in the plaques and the pathological condition has not been elucidated. It is probable that other factors and/or other domains of the molecule are also involved.